IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Burton et al. Art Unit : Unknown
Serial No. : unassigned Examiner : Unknown
Filed : February 15, 2002
Title : LIGAND CAPTURE-DIRECTED SELECTION OF ANTIBODY

Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Prior to examination, please amend the application as follows:

In the specification:

Include the following paragraph at page 1, line 1:

--This application is a divisional of U.S. application serial no. 08/972,564, filed November 18, 1997, which is a continuation of U.S. application serial no. 08/316,914, filed October 3, 1994, the disclosure of which is considered part of (and is incorporated by reference in) the disclosure of this application.--

CERTIFICATE OF MAILING BY EXPRESS MAIL

Express Mail Label No. EV 044489755 US

I hereby certify under 37 CFR §1.10 that this correspondence is being deposited with the United States Postal Service as Express Mail Post Office to Addressee with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

February 19, 2002
Date of Deposit

Signature

Gabe Lewis
Typed or Printed Name of Person Signing Certificate

In the claims:

Cancel claims 1-14.

Amend claims 15 and 16 as follows:

15. (Amended) A antibody that binds to a previously unknown epitope on a preselected antigen, said antibody obtained by the method comprising:

a) forming an immunocomplex by contacting the preselected antigen with a first antibody bound to a solid support, wherein the first antibody specifically binds to a preselected epitope present on the preselected antigen;

b) contacting the immunocomplex of a) with a combinatorial library of antibodies under conditions that allow binding of the second antibody to the previously unknown epitope, wherein a second antibody is obtained from screening the combinatorial library;

c) removing the second antibody of b) from the previously unknown epitope; and

d) obtaining the second antibody.

16. (Amended) The antibody of claim 15, wherein the antibody has the specificity of an antibody produced by E. coli ATCC 69522.

The following claims have been added:

17. The antibody of claim 15, wherein the first antibody is an Fb or an Fab fragment.

18. The antibody of claim 15, wherein the antigen is selected from the group consisting of a bacterial, a viral, a parasitic, a fungal, a tumor and a self-antigen.

19. The antibody of claim 18, wherein the viral antigen is selected from the group of viruses consisting of a hepatitis B virus (HBV), a human immunodeficiency virus (HIV), an influenza A virus, an Epstein Barr virus (EBV), a herpes simplex virus (HSV), a respiratory syncytial virus (RSV), a human cytomegalovirus (HCMV), a varicella zoster virus (VZV), and a measles virus.

20. The antibody of claim 19, wherein the viral antigen is a HSV glycoprotein D.

21. The antibody of claim 15, wherein the preselected epitope is a non-neutralizing epitope.

22. The antibody of claim 15, wherein the previously unknown epitope is a neutralizing epitope.

23. The antibody of claim 17, further comprising sequencing a nucleic acid encoding an amino acid sequence of the second antibody.

REMARKS

Prior to examination, Applicant respectfully requests entry of the present preliminary amendment. Claims 1-14 have been canceled without prejudice. Claims 15 and 16 have been amended. Claims 17-23 have been added. No new matter has been added. Upon entry of the preliminary amendment, claims 15-23 are pending and under examination. Attached is a marked-up version of the changes being made by the current amendment.

No fee is believed to be due in connection with the filing of this paper; however, please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 2/19/02

Michael Reed, Ph.D.
Reg. No. 45,647

Fish & Richardson P.C.
4350 La Jolla Village Drive, Suite 500
San Diego, California 92122
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

Version with markings to show changes made

In the specification:

Include the following paragraph at page 1, line 1:

--This application is a divisional of U.S. application serial no. 08/316,914, filed October 3, 1994, the disclosure of which is considered part of (and is incorporated by reference in) the disclosure of this application.--

In the claims:

Claims 1-14 have been cancelled.

Claims 15 and 16 have been amended as follows:

15. A[n] antibody [molecule identified] that binds to a previously unknown epitope on a preselected antigen, said antibody obtained by the method [of claim 1] comprising:

a) forming an immunocomplex by contacting the preselected antigen with a first antibody bound to a solid support, wherein the first antibody specifically binds to a preselected epitope present on the preselected antigen;

b) contacting the immunocomplex of a) with a combinatorial library of antibodies under conditions that allow binding of the second antibody to the previously unknown epitope, wherein a second antibody is obtained from screening the combinatorial library;

c) removing the second antibody of b) from the previously unknown epitope; and

d) obtaining the second antibody.

16. (Amended) The antibody [molecule] of claim 15, wherein the antibody [molecule] has the specificity of an antibody [molecule] produced by E. coli ATCC 69522.

The following claims have been added:

17. The antibody of claim 15, wherein the first antibody is an Fb or an Fab fragment.

18. The antibody of claim 15, wherein the antigen is selected from the group consisting of a bacterial, a viral, a parasitic, a fungal, a tumor and a self-antigen.

19. The antibody of claim 18, wherein the viral antigen is selected from the group of viruses consisting of a hepatitis B virus (HBV), a human immunodeficiency virus (HIV), an influenza A virus, an Epstein Barr virus (EBV), a herpes simplex virus (HSV), a respiratory syncytial virus (RSV), a human cytomegalovirus (HCMV), a varicella zoster virus (VZV), and a measles virus.

20. The antibody of claim 19, wherein the viral antigen is a HSV glycoprotein D.

21. The antibody of claim 15, wherein the preselected epitope is a non-neutralizing epitope.

22. The antibody of claim 15, wherein the previously unknown epitope is a neutralizing epitope.

23. The antibody of claim 17, further comprising sequencing a nucleic acid encoding an amino acid sequence of the second antibody.